

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for facilitating long-running transactions of a business workflow process, comprising:

reducing a business process to XML code of a scheduling programming language written in XML;

dividing the reduced business process into at least one independent transaction and at least one parent ~~interdependent~~ transaction, the at least one independent transaction is not interdependent with the at least one parent transaction, the at least one parent ~~interdependent~~ transaction has comprises two or more ~~non-uniform~~ child interdependent transactions that are each different from each other and interdependent with each other, each child transaction receiving data that is at least partially different from data received by the other child transactions, the child transactions are children of the parent transaction;

executing the at least one independent transaction independently from the at least one parent ~~interdependent~~ transaction to increase throughput and decrease latency of the business process, the at least one independent transaction commits upon successful execution;

executing the child interdependent transactions independently from each other, the at least one parent interdependent transaction commits ~~when a last~~ after all child interdependent transaction have committed ~~commits~~; and

transferring committed data associated with the at least one independent transaction and the at least one parent ~~interdependent~~ transaction to a computer component for further processing.

2. (Previously presented) The method of claim 1, the child interdependent transactions respectively include one or more actions, the one or more actions are concurrently executed independently from each other.
3. (Previously presented) The method of claim 2, respective child interdependent transactions commit when all of their associated actions are completed.
4. (Previously presented) The method of claim 1, further comprising explicitly defining transaction boundaries for the at least one independent transaction and the child interdependent transactions as a function of a number of actions within the at least one independent transaction and the child interdependent transactions, respectively, in order to define a granularity at an action level.
5. (Previously presented) The method of claim 1, the child interdependent transactions are concurrently executed in isolation from each other.
6. (Currently Amended) The method of claim 1, further comprising employing separate machines to execute the at least one independent transaction and the at least one parent ~~interdependent~~ transaction.
7. (Currently Amended) A system that uses an XML-based programming language for facilitating implementation of business processes within a computer-readable medium, the components comprising:
 - a user interface component; and
 - a plurality of model components accessible through the user interface component, the plurality of model components allows a user to create a model of a business process and reduce the model *via* the XML-based programming language, the plurality of model components comprises a distinguishing model component that distinguishes between ~~concurrent~~ autonomous business operations and ~~concurrent~~ interdependent business operations, the autonomous business operations are not dependent on each other for completion and are concurrent with respect to each other, the interdependent business

operations are dependent on each other for completion and are concurrent with respect to each other, the ~~concurrent~~ interdependent business operations being non-identical and each receiving data that is at least partially different from each other.

8. (Currently Amended) The system of claim 7, further comprising a transaction grouping component that groups business operations into interdependent business operations ~~concurrent interdependent transactions~~.
9. (Currently Amended) The system of claim 8, the transaction grouping component provides synchronization of interdependent business operations ~~concurrent interdependent transactions~~ based on completion of the interdependent business operations ~~concurrent interdependent transactions~~.
10. (Currently Amended) The system of claim 7, further comprising an action grouping component that groups business operations into interdependent business operations ~~concurrent interdependent actions~~.
11. (Currently Amended) The system of claim 10, the action grouping component provides synchronization of interdependent business operations ~~concurrent interdependent actions~~ based on completion of the interdependent business operations ~~concurrent interdependent actions~~.
12. (Previously presented) The system of claim 7, the plurality of components further comprising at least one boundary establishing component that defines transaction boundaries.
13. (Previously presented) The system of claim 12, the at least one boundary establishing component includes a component that establishes concurrent operations.
14. (Previously presented) The system of claim 12, the at least one boundary establishing component includes a component for establishing sequential operations.

15. (Currently Amended) The system of claim 12, further comprising a compensation component that compensates committed interdependent business operations ~~interdependent concurrent transactions~~ and is invoked upon the occurrence of a failed interdependent business operations ~~interdependent concurrent transaction~~.

16. (Currently Amended) The system of claim 15, the interdependent business operations ~~interdependent concurrent transactions~~ are children operations ~~transactions~~ in a parent operation ~~transaction~~, wherein the compensation component is invoked by the parent operation ~~transaction~~.

17. (Currently Amended) The system of claim 15, the compensation component calls compensation routines within the committed interdependent business operations ~~interdependent concurrent transactions~~.

18. (Currently Amended) The system of claim 15, the compensation component calls compensation routines within the failed interdependent business operations ~~interdependent concurrent transaction~~.

19. (Currently Amended) The system of claim 18, the compensation routines utilize information within the committed interdependent business operations ~~interdependent concurrent transactions~~.

20. (Currently Amended) The system of claim 15, the compensation component calls compensation routines within the failed interdependent business operations ~~interdependent concurrent transaction~~ based on information on the committed interdependent business operations ~~interdependent concurrent transactions~~ stored within a database.

21. (Previously presented) The system of claim 13, the computer readable medium resides on a computer system.

22. (Previously presented) The system of claim 7, the plurality of components further comprising a component that defines concurrent synchronizing constraints as occurring upon completion of the autonomous operations.

23-27. (Cancelled).

28. (Currently Amended) A system that uses a scheduling programming language for representing business operations, comprising:

means for distinguishing between synchronization of autonomous ~~concurrent~~ operations from interdependent ~~concurrent~~ operations, the autonomous operations are not dependent on each other for completion and are concurrent with respect to each other, the interdependent operations are dependent on each other for completion and are concurrent with respect to each other, the autonomous ~~concurrent~~ operations and the interdependent concurrent ~~operations~~ are represented in the scheduling programming language, the scheduling programming language based at least in part on XML, the ~~interdependent concurrent operations comprise pluralistic~~ interdependent ~~concurrent~~ operations each receive data that is at least partially dissimilar with respect to data received by each interdependent operation;

means for expressing synchronization constraints on completion of autonomous ~~concurrent~~ operations; and

means for allowing association of transaction operations and groups of business operations.

29. (Currently Amended) The method of claim 1, further comprising failing the at least one parent ~~interdependent~~ transaction when at least one of its child interdependent transactions does not commit, and compensating the at least one failed child interdependent transaction.

30. (Currently Amended) The method of claim 29, the at least one parent ~~interdependent~~ transaction invokes a compensation routine within the at least one failed child interdependent transaction that compensates the at least one failed child interdependent transaction.
31. (Previously presented) The method of claim 1, further comprising compensating the at least one independent transaction when at least one of the child interdependent transactions does not commit.
32. (Currently Amended) The method of claim 1, further comprising compensating the at least one parent ~~interdependent~~ transaction when it does not commit and all of its child interdependent transactions commit.
33. (Currently Amended) The method of claim 32, the at least one parent ~~interdependent~~ transaction invokes its own compensation routine.